

SMOKING IN THE WORKPLACE: VENTILATION

CLAIM: CIGARETTE SMOKE IS RESPONSIBLE FOR "SICK BUILDING" COMPLAINTS.

RESPONSES:

- Because it is visible and easily identified by its aroma, tobacco smoke is often blamed for poor indoor air quality. Government and private studies of "sick buildings" in the United States and Canada report, however, that tobacco smoke is related to only two percent to five percent of the buildings investigated for complaints about air quality.(1) This suggests that even a total smoking ban is not likely to affect comfort problems in 95 to 98 percent of "sick buildings."(2)
- The majority of indoor air quality problems in "sick buildings" have been traced to inadequate fresh air and poor air filtration. Because the visibility of tobacco smoke may be an indicator of inadequate ventilation, the prohibition of smoking often serves to mask the real reason for poor indoor air quality -- lack of proper ventilation. In addition, concentrating on tobacco smoke ignores the fact that adequate ventilation should always

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be provided in any enclosed space, regardless of whether or not smoking is permitted.

- In 1981, the American Society of Heating, Refrigeration and Air-Conditioning Engineers (ASHRAE) issued a ventilation standard for public places (ASHRAE 62-1981). The Standard established two levels of ventilation, one for areas in which smoking was permitted, and another substantially lower rate for areas where smoking was prohibited. The Standard was recently revised and reissued (ASHRAE 62-1989) with one prescribed ventilation rate, regardless of whether smoking was permitted or not. The decision to reject separate ventilation rates based solely upon the presence or absence of smokers was influenced by two areas of research. First, the amount of ventilation required to remove indoor air constituents produced by humans, namely carbon dioxide and body odor, is also sufficient to remove typical amounts of ETS. Second, ventilation rates for nonsmoking areas under ASHRAE 62-1981 were found to be inadequate and permitted airborne substances to increase, even in the absence of ETS. (3)

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